Merriam shows that there are still possibilities in both lines, and that her book is not without *raison d'être.* It is admirably adapted as 'A Bird Book for Beginners,' and we trust it will achieve the success it so well merits. — J. A. A.

Hair and Feathers.[1]—Professor Kingsley here reviews recent investigations regarding the development and structure of hair and feathers, notably those published in Germany, of which he presents a brief summary. He makes special acknowledgment to the recent able review of the subject by Professor Keibel, in Merkel and Bonnet's 'Ergebnesse der Anatomie und Entwickelungsgeschichte,' 1896. As is now well known, hair and feathers are not only unlike in structure and appearance, but in method of origin and growth. "According to Davies all contour feathers are preceded by down-feathers," or, in other words, "the germ of the definitive feather is a direct derivative of the germ of the down-feather." The process of formation is described at some length, concluding as follows: "With the withdrawal of the pulp from the feather there is no longer any nerve or blood supply to the parts of the feather. The cells of which it is composed are dead and dry so that it seems impossible that any change can take place in it. The whole question of change in color of the fully formed feather was recently reopened by Mr. J. A. Allen who maintained that, once formed, the feathers do not change in their markings. The whole history of development seems to afford him full support. Yet this year [1897] the attempt has been made to show that feathers do change in their markings. In this, as the matter now stands, the burden of proof is upon those who support the possibility of change."

Regarding the origin of hair and feathers, reference is made to the old view that they were of homologous origin, and that both were derived from the reptilian scale. "It may be said, however," says Kingsley, "that Davies, to whom we owe the most accurate account of the development of the feather declines to regard pin-feathers [filoplumes?] as the simplest type of the avian tegumentary covering but rather as a retrograde condition; and farther, that he regards the scales upon the tarsal and digital regions of birds as secondary formations, agreeing in this with Jeffries." Again, "Maurer maintains that hair and feathers are not homologous structures. The feather, according to his view has been derived from the Reptilian scale while hair has arisen from the dermal sense organs of the Ichthyopsida as a result of a change in habits and conditions of life." A brief statement is given of Maurer's investigations and conclusions, and the reader is further advised to refer to Keibel's summary, "with its bibliography of over one hundred titles."— J. A. A.

Baur on the Birds of the Galapagos Archipelago.— Dr. Baur reiterates

[1] Hair and Feathers. By J. S. Kingsley. Amer. Naturalist, Vol. XXXI, Sept. 1897, pp. 767–777, figs. 1–14.

here [1] his belief that *Cactornis* is generically separable from *Geospiza*, contrary to the view of Mr. Ridgway, and claims that "the *Cactornis propinqua* Ridgway from Tower Island in the north and *Geospiza conirostris* Ridgway from Hood Island in the south of the Archipelago have no relationship whatever." He believes that "all the plastic genera, which are represented only by a single species on each island, as *Nesomimus*, *Certhidia*, *Pyrocephalus* and *Cactornis*, show peculiar species on nearly every island," while there are genera, "like *Geospiza* and *Cactornis*, which have more than one species on one island,— two or three, perhaps four." In explanation of this he says we "simply have to imagine that already, before the splitting up of the Galapagos land area into distinct islands, there existed at least three species of *Geospiza* and *Camarhynchus*, each of which became differentiated on the different islands. This shows at once that we can not arrange these species in one series, [as done by Mr. Ridgway] but in three parallel series," etc.

Dr. Baur makes a few remarks about the birds from Charles, Hood, Barrington, and South Albemarle Islands, and explains that the disappearance of the box of specimens at Guayaquil was not so serious a loss as supposed, only three species being lost instead of the much larger number stated by Mr. Ridgway. Of the others alcoholic specimens were preserved. Dr. Baur also makes some additions to the lists of species given by Mr. Ridgway from some of the islands. — J. A. A.

Bulletin of the B. O. C.— No. XLIX of this periodical, Dec. 29, 1897, contains among other novelties *Phaëton americanus* sp. n., the North American bird being distinguished from *P. flavirostris* by having the black on outer web of 1st primary extending within 0.50 of the end, that on 2d and 4th primaries reaching almost to the tip, the whole outer web of the 3d black, and the bill entirely black, except above the nasal opening.— E. C.

Publications Received. — **Blasius**, Rud. Die deutschen Grasmücken (Sylviinæ). (Jahresb. des Ver. für Naturwiss. zu Braunsweig, XI, 1897, pp. 22–25.)

Bocage, J. V. Barboza du. José D'Anchieta. (Jorn. de Sci. Math., Phys. e Nat., XVIII. 1897, pp. 126–132.)

Clark, W. Eagle. (1) On Some Birds from the Island of Negros, Philippines. Part III. (Ibis, Jan., 1898, pp. 119–124). (2) On Hybrids between the Capercaille and the Pheasant. (Ann. Scottish Nat. Hist., Jan., 1898, pp. 17–21.)

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[1] Birds of the Galapagos Archipelago: a Criticism of Mr. Robert Ridgway's Paper. By G. Baur, University of Chicago. Amer. Naturalist, Vol. XXXI, Sept., 1897, pp. 777–784.